

REMARKS

The Office Action mailed September 19, 2007 has been carefully considered.

Reconsideration in view of the following remarks is respectfully requested.

In the Specification, the paragraphs 2-3, 5, 16, 18-19, 21, 26-27, 32, 38, 46, 51, and 64 have been amended to correct minor editorial problems. No new matter has been added. The amendments to the Specification include amendments to the Specification made in an Amendment under 37 C.F.R. § 1.312, filed on October 17, 2005.

Claim 13 has been amended to further particularly point out and distinctly claim subject matter regarded as the invention. Support for this change may be found in the specification, figures, and claims as originally filed. The text of claim 14 is unchanged, but its meaning is changed because it depends from amended claim 13.

New claim 16-23 also particularly point out and distinctly claim subject matter regarded as the invention. Claim 16 is a means-plus-function apparatus claim corresponding to method claim 1. Claims 17-23 are non-means-plus-function apparatus claims corresponding to the “second switch” of method claims 1-7. Support for these claims may be found in the specification, figures, and claims as originally filed.

The First 35 U.S.C. § 112, Second Paragraph Rejection

Claim 13 stands rejected under 35 U.S.C. § 112, second paragraph, as lacking sufficient antecedent basis.¹ With this Amendment, Claim 13 has been amended to provide proper antecedent basis. Withdrawal of the 35 U.S.C. § 112, second paragraph rejection of Claim 13 is respectfully requested.

The Second 35 U.S.C. § 112, Second Paragraph Rejection

Claim 12 stands rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter the Applicants regard as the invention.² Specifically, the Examiner contends it is unclear what Claim 12 depends from.³ This rejection is respectfully traversed. The Applicants respectfully submit that as Claim 12 refers to no other claim, Claim 12 is clearly an *independent* claim. Accordingly, withdrawal of the 35 U.S.C. § 112, second paragraph rejection of Claim 12 is respectfully requested.

The 35 U.S.C. § 102 Rejection

Claims 1-15 stand rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by Oguchi,⁴ of which Claims 1, 8, 12, 13, and 15 are independent claims.⁵ This rejection is respectfully traversed.

According to the M.P.E.P., a claim is anticipated under 35 U.S.C. § 102(a), (b) and (e) only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.⁶

Claim 1

Claim 1 recites:

A method for enabling a first network to control a loop avoidance protocol in a second network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol

¹ Office Action mailed September 19, 2007, at ¶ 3.

² Office Action at ¶ 3.

³ Office Action at ¶ 3.

⁴ U.S. Publication No. 2003/0142680 to Oguchi.

⁵ Office Action at ¶ 4.

⁶ Manual of Patent Examining Procedure (MPEP) § 2131. See also *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

instance, the first and second network being communicably coupled, the method comprising:
receiving a protocol packet from the second network at a first switch;
forwarding the protocol packet to a second switch in the first network;
processing the protocol packet at the second switch according to a loop avoidance protocol corresponding to the second network; and
transmitting a message controlling the port state of a third switch based on the processing.

The Examiner states:

... Oguchi discloses method for enabling a first network to control a loop avoidance protocol in a second network, the first network running a first loop avoidance protocol instance, the second network not running the first loop avoidance protocol instance, the first and second network being communicably coupled, the method comprising:
receiving a protocol packet (BPDU) from the second network (External Network 55) at a first switch (Backbone network), "When a frame forwarding device receives an STP BPDU from a user network, its local system state updating unit 50c updates its local copy of system state information with the received STP BPDU, as besides changing the state of a logical bridge port" [0065], forwarding the protocol packet to a second switch in the first network;
processing the protocol packet at the second switch according to a loop avoidance protocol corresponding to the second network; and
transmitting a message controlling the port state of a third switch based on the processing (see steps S85, S87, S88, S80 of FIG. 21).⁷

The Applicants respectfully disagree for the reasons set forth below.

Contrary to the Examiner's statement, Oguchi does not disclose processing the protocol packet at the second switch according to a loop avoidance protocol corresponding to the second network as required by Claim 1. In support of the Examiner's contention, the Examiner refers to the following portion of Oguchi:

[0208] STEP S85:

[0209] The frame forwarding device 81 determines whether the BPDU frame was received on an inter-node connection port or on an external network port. If it was received on an external network port, the process proceeds to step S87. Otherwise, the process advances to step S86.

[0210] STEP S86:

⁷ Office Action dated September 19, 2007, p. 3.

[0211] The frame forwarding device 81 creates a BPDU if it is necessary to retransmit it. The process then advances to step S80 to send out the created message.

[0212] STEP S87:

[0213] The frame forwarding device 81 determines on which inter-node connection ports the BPDU should be forwarded. This is accomplished by finding a logical bridge port number that is associated with the external network port on which the BPDU was received, and then retrieving relevant inter-node connection ports from the outgoing inter-node connection port mapping table of FIG. 20. The process then proceeds to step S88.

[0214] STEP S88:

[0215] The frame forwarding device 81 encapsulates the outgoing BPDU. The process then advances to step S80 to send it out.⁸

The above portion of Oguchi cited by the Examiner speaks generally about receiving a BPDU from an external network port and forwarding that BPDU on the internal network, but says nothing about the loop avoidance protocol in the external network. Thus, the cited portion of Oguchi cannot be said to disclose processing the protocol packet at the second switch according to a loop avoidance protocol corresponding to the second network as required by Claim 1.

Also contrary to the Examiner's statement, the cited portion of Oguchi also does not refer to transmitting a message controlling the port state of a third switch, let alone such a message that is based on the above processing as required by Claim 1.

For the above reasons, the 35 U.S.C. § 102 rejection of Claim 1 is unsupported by the cited art of record. Thus, a *prima facie* case has not been established and the rejection must be withdrawn.

⁸ Oguchi at ¶¶208-215.

Dependent Claims 2-7

Claims 2-7 depend from Claim 1. Claim 1 being allowable, Claims 2-7 must also be allowable for at least the same reasons as Claim 1.

Claim 2

Claim 2 recites:

The method as recited in claim 1, wherein the forwarding includes modifying the protocol packet so that the protocol packet is able to be tunneled through the first network.

The Examiner states:

... Oguchi teaches wherein the forwarding includes modifying the protocol packet so that the protocol packet is able to be tunneled through the first network [0215] "The frame forwarding device 81 encapsulates the outgoing BPDU".⁹

The Applicants respectfully disagree for the reasons set forth below.

Contrary to the Examiner's statement, Oguchi does not teach wherein the forwarding includes modifying the protocol packet so that the protocol packet is able to be tunneled through the first network as required by Claim 2. In support of the Examiner's contention, the Examiner refers to the following portion of Oguchi:

[0215] The frame forwarding device 81 encapsulates the outgoing BPDU. The process then advances to step S80 to send it out.¹⁰

The above portion of Oguchi cited by the Examiner merely teaches encapsulating the outgoing BPDU, apparently without modifying the BPDU itself. Whereas Claim 2 requires *modifying* the protocol packet so it may be tunneled through the first network. Thus, Oguchi does not teach modifying the protocol packet as required by Claim 2. For this additional reason, the 35 U.S.C. §

⁹ Office Action, p. 4.

102 rejection of Claim 2 is unsupported by the cited art of record and the rejection must be withdrawn.

Claim 3

Claim 3 recites:

The method as recited in claim 1, wherein the controlling includes modifying a port state of the third switch.

The Examiner states:

... Oguchi teaches wherein the controlling includes modifying a port state of the third switch (S87 of figure 21).¹¹

The Applicants respectfully disagree for the reasons set forth below.

Contrary to the Examiner's statement, the cited portion of Oguchi does not disclose wherein the controlling includes modifying a port state of the third switch as required by Claim 3. The cited portion of Oguchi refers to determining output ports, but only two switches are involved in the portion of Oguchi cited by the Examiner - there is no third. For this additional reason, the 35 U.S.C. § 102 rejection of Claim 3 is unsupported by the cited art of record and the rejection must be withdrawn.

Claims 8, 13, and 15

Claim 8 is a system claim corresponding to method claim 1. Claim 13 includes limitations similar to method claim 1. Claim 15 is an *In re Beauregard* claim corresponding to method claim 1. Claim 1 being allowable, Claims 8 and 15 must also be allowable for at least the same reasons as Claim 1.

¹⁰ Oguchi at ¶215.

Dependent Claims 9-11 and 14

Claims 9-11 depend from Claim 8. Claim 14 depends from Claim 13. Claims 8 and 13 being allowable, Claims 9-11 and 14 must also be allowable for at least the same reasons as Claims 8 and 13, respectively.

Claim 12

Claim 12 recites:

A first network running a loop avoidance protocol wherein the root bridge for the first network is disposed in a second network running a distinct loop avoidance protocol instance.

The Examiner states:

... Oguchi teaches a first network running a loop avoidance protocol wherein the root bridge for the first network is disposed in a second network running a distinct loop avoidance protocol instance (see 50c of FIG. 1).¹²

The Applicants respectfully disagree for the reasons set forth below.

Contrary to the Examiner's statement, the cited portion of Oguchi does not disclose running a loop avoidance protocol wherein the root bridge for the first network is disposed in a second network running a distinct loop avoidance protocol instance as required by Claim 12. The cited portion of Oguchi refers to a system state updating unit that updates the system state information according to the spanning tree algorithm; there is no reference to any other than one particular loop avoidance protocol instance. For this reason, the 35 U.S.C. § 102 rejection of Claim 12 is unsupported by the cited art of record. Thus, a *prima facie* case has not been established, and the rejection must be withdrawn.

¹¹ Office Action, p. 4.

In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Conclusion

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.


The Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-1698.

Respectfully submitted,

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¹² Office Action, p. 5.